

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/625,725	07/24/2003	Kazutaka Hattori	VX032541	8054	
21369 7	590 02/15/2006		EXAMINER		
POSZ LAW GROUP, PLC			ALI, HYDER		
12040 SOUTH LAKES DR.			ART UNIT	PAPER NUMBER	
SUITE 101 RESTON, VA	20101		3747	THE ER HOMBER	
RESTON, VA	20171		3/4/		

DATE MAILED: 02/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applicati	on No.	Applicant(s)		
Office Action Summary		10/625,7	25	HATTORI ET AL.	HATTORI ET AL.	
		Examine	<u> </u>	Art Unit		
		HYDER A	LI	3747		
Period fo	The MAILING DATE of this communicati r Reply	on appears on the	e cover sheet wi	th the correspondence ad	dress	
WHIC - Exter after - If NO - Failui Any r	CORTENED STATUTORY PERIOD FOR EHEVER IS LONGER, FROM THE MAILING ISSUE OF THE MAILING ISSUE O	ING DATE OF THE CFR 1.136(a). In no evition. In price year, y period will apply and we statute, cause the apply statute.	HIS COMMUNIC ent, however, may a re rill expire SIX (6) MON plication to become AB	CATION. eply be timely filed THS from the mailing date of this & MANDONED (35 U.S.C. § 133)		
Status						
2a)□	Responsive to communication(s) filed or This action is FINAL . 2b) Since this application is in condition for a closed in accordance with the practice u	☐ This action is rallowance except	for formal matt	·	e merits is	
Dispositi	on of Claims					
5)⊠ 6)⊠ 7)⊠ 8)□ Applicati 9)□ 10)⊠	Claim(s) 1-9 is/are pending in the applicate 4a) Of the above claim(s) is/are well allowed. Claim(s) 5,6 and 9 is/are allowed. Claim(s) 1-4 is/are rejected. Claim(s) 7 and 8 is/are objected to. Claim(s) are subject to restriction on Papers The specification is objected to by the Extended the specification is objected to by the Extended the specificant may not request that any objection Replacement drawing sheet(s) including the specification is objected to be a deplaced to be specified to the specific and the s	and/or election raminer. re: a) accepte to the drawing(s) the correction is required.	equirement. ed or b) object be held in abeyan ed if the drawing(ce. See 37 CFR 1.85(a). (s) is objected to. See 37 CF		
•	The oath or declaration is objected to by	tile Examiniei. No	ole life allached	Office Action of form P1	O-152.	
12)⊠ <i>i</i> a)[Acknowledgment is made of a claim for for All b) Some * c) None of: 1. Certified copies of the priority docu 2. Certified copies of the priority docu 3. Copies of the certified copies of the application from the International € ee the attached detailed Office action for	uments have bee uments have bee e priority docum Bureau (PCT Rul	en received. en received in A ents have been e 17.2(a)).	pplication No received in this National	Stage	
2) 🔲 Notice 3) 🔯 Inform	(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-9 nation Disclosure Statement(s) (PTO-1449 or PTO/ No(s)/Mail Date 7/5/05.		Paper No(s	ummary (PTO-413))/Mail Date uformal Patent Application (PTO)-152)	

Art Unit: 3747

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 1. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Imamichi et al (JP-11-030164).

As to Claim 1, **Imamichi et al** discloses a fuel injection system for a diesel engine, comprising a fuel injection nozzle 21 adapted to inject a fuel toward the interior of a combustion chamber of the diesel engine, an inert material supply passage 6d from which an inert material with respect to the fuel is supplied, and a fuel passage 6c communicating with the inert material supply passage, and adapted to pass the fuel injected from the fuel injection nozzle therethrough, wherein the fuel from the fuel injection nozzle is injected toward an inert material supplied from the inert material supply passage 6d.

As to Claim 3, **Imamichi et al** discloses a fuel injection system for a diesel engine comprising a fuel injection nozzle 21 adapted to inject a fuel toward the interior of a combustion chamber of the diesel engine, an inert material supply passage 6d from which an inert material with respect to the fuel is supplied, and a fuel passage 6c communicating with the inert material supply passage 6d, and adapted to pass the fuel injected from the fuel injection nozzle therethrough, wherein the inert material supply

Art Unit: 3747

passage 6d is communicating with the fuel passage 6c in a position offset from a center of cross sections of the fuel passage 6c, and wherein the fuel from the fuel injection nozzle 21 is injected toward the inert material supplied from the inert material supply passage 6d.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imamichi et al (JP-11-030164) in view of Document (JP-2668026).

Imamichi et al discloses the limitations of independent claims 1 and 3 as cited above. **Imamichi et al** does not disclose a controller controlling a quantity of the inert material supplied from the inert material supply passage.

Document (JP-2668026) discloses a controller 90 controlling a quantity of the inert material supplied from the inert material supply passage 30.

It would have been obvious to a person having ordinary skill in the art to modify

Imamichi et al by employing a controller 90 controlling a quantity of the inert material supplied from the inert material supply passage 30 as taught by Document (JP
2668026) in order to provide Imamichi et al engine with a controller controlling a quantity of the inert material supplied from the inert material supply passage.

Application/Control Number: 10/625,725

Art Unit: 3747

Page 4

Allowable Subject Matter

Claims 5,6,9 are allowed.

Claims 7 and 8 are objected to as being dependent upon a rejected base claim,

but would be allowable if rewritten in independent form including all of the limitations of

the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims 1-9 have been considered but are

moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to HYDER ALI whose telephone number is (571) 272-4836. The examiner

can normally be reached on M-F (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, HENRY YUEN can be reached on (571) 272-4856. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ha

Hyder Al.

Henry C. Yuen

Supervisory Patent Examiner

Group 3700